

aw Meter DK-aw-1X00

Reliable Water Activity Measurements



aw-Meter and Data Logger Type DK-aw-1100/1000

The DK-aw models are best suited for measuring the relative equilibrium moisture content of granulates and pasty products.

Both food and pharmaceutical industries offer a wide variety of applications for efficient measurements of equilibrium moisture content.

With the aw meter model DK-aw-1100/-1S the results are shown 20-40 seconds after the sample has been put into the sample holder, the measuring head has been mounted, and the temperature has stabilized.

The DK-aw-1000-3S provides ports for up to three external humidity, temperature or aw probes. See the following page for the respective range of available probes.

The DK-aw meter measures water activity in the range of 0...1 aw with a measurement accuracy of 0.018 aw.



Models

Three models of this water activity meter are available to meet your demands:

DK-aw-1100

Data logger with fan only

DK-aw-1100-1S

Data logger with fan and one port for an external probe

DK-aw-1000-3S

Data logger without ventilated probe, comes with three ports for up to three external probes.

Fan

Temperature probe
(Sample temperature)

Combined humidity and
temperature sensor



System Design

The DK-aw-1100 is a modern water activity meter including a data logger. Its measuring head and display are combined into a single unit making it especially compact and space-saving.

The small sample volume and the miniaturized built-in fan ensure that the air above the sample is well mixed thus allowing for short response times which typically lie between 20 to 40 seconds.

Measuring errors can be eliminated by making sure the temperature of the sample as well as the temperature of the air above it match. The top unit also features a temperature probe with fast response time helping to make sure temperature equalization is successfully finished.

External Probes

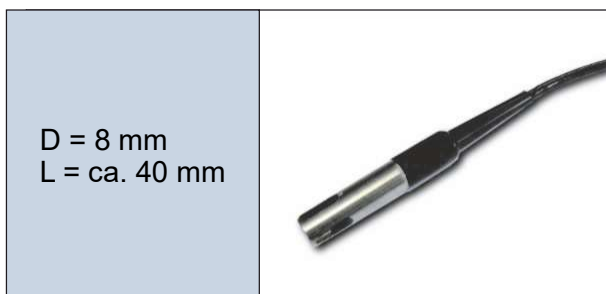
For measurements in bulk materials such as pills, grains or plastic granules we offer the DK-aw-1115 penetration probe.

It has a diameter of 8 mm and small slots which allow air to diffuse into the probe. A filter protects the sensor against dust and powder.

For measurements within packages or confined spaces we offer the cable probe DK-aw-1116.



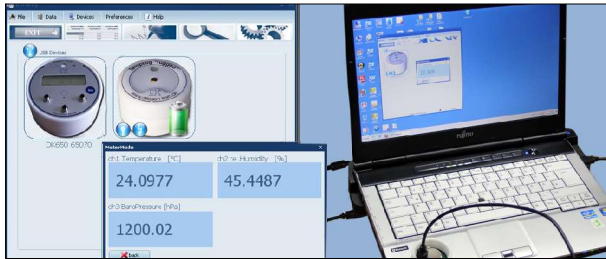
Penetration probe DK-aw-1115



D = 8 mm
L = ca. 40 mm

Cable probe DK-aw-1116

Data Logging



The DK-aw meter comes with an integrated data logger for long-term measurements.

The required InfraLog for Windows V5 Software (start/stop/download/export to excel) is included in delivery as a free download together with a USB cable.

Software InfraLog for Windows V5

The software InfraLog provides easy, secure & convenient control for all Driesen + Kern products. After establishing a connection between the logger and your PC, InfraLog automatically detects the device.



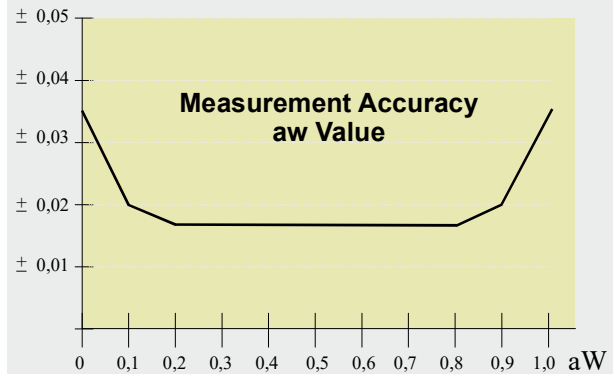
Well-arranged charts with overview and up to three Y-axes

Zooming function

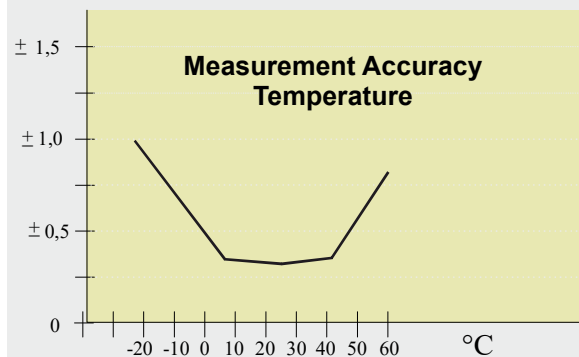
Optionally available: InfraLog V5 Light with additional graphic charts. Create daily, weekly or yearly reports with our enhanced version. Visit our website for more information about InfraLog for Windows software.

The DK-aw-1100 meter can be powered by internal batteries or by external power supply.

aW



°C



Specifications

Relative Humidity

Sensor type: capacitive CMOSens sensor element
 Measuring range: 0...100% RH (0...1.0 aW)
 Accuracy: see diagram
 Response time: ca. 20-40 seconds

Temperature

Sensor type: CMOSens structure
 Measuring range: 5...60°C
 Storage temperature: -40...+60°C
 Accuracy: see diagram
 Response time: ca. 20-40 seconds

Units

aW value, relative humidity, absolute humidity
 Measuring ranges on request

Dimensions

DK-aw-1100: d = 90 mm, h = 150 mm
 DK-aw-1100-1S: d = 90 mm, h = 150 mm
 DK-aw-1000-3S: d = 80 mm, h = 40 mm
 DK-aw-1115-Penetration Probe: d = 8 mm, l = 300 mm
 DK-aw-1116-Cable Probe: d = 8 mm, l = 40 mm